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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,639	10/27/2000	Hideki Komatsuda	105193.01	4482

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EXAMINER

FULLER, RODNEY EVAN

ART UNIT PAPER NUMBER

2851

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,639

Applicant(s)

KOMATSUDA, HIDEKI

Examiner

Rodney E Fuller

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-46, 52-61 and 77-83 is/are allowed.
- 6) ☒ Claim(s) 47-49, 51, 62, 69, 74 and 84 is/are rejected.
- 7) ☒ Claim(s) 50, 63-68, 70-73, 75, 76 and 85-90 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 11, 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submissions filed on November 19, 2002 and December 16, 2002 have been entered.

Remarks

2. In response to applicant's Amendment, dated December 16, 2002, the examiner acknowledges the addition of claims 47-90. Claims 1-90 are pending.
3. Claims 1-46 were indicated allowable in the Notice of Allowability mailed August 19, 2002.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 47-49, 51, 62, 69, 74, and 84 are rejected under 35 U.S.C. 102(b) as being anticipated by Jewell, et al. (US 5,315,629).

Regarding claims 47, 62, 69, 74, and 84, Jewell discloses “a projection system having an exposure field that is decentered with respect to an optical axis (Fig. 2, ref.# 34) in order to project a reduction image of a pattern formed on a mask (Fig. 2, ref.# 22) onto a photosensitive substrate (Fig. 2, ref.# 32); an illumination optical system (Fig. 2, ref.# 20) that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system (Fig. 2, ref.# 34); a drive (Fig. 1, ref.# 18) that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and an illumination adjustment mechanism (Fig. 1, ref.# 14) that adjusts an illumination characteristic along the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask, and/or an illumination characteristic crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.”

Regarding claim 48, Jewell discloses “wherein the illumination optical system includes a plurality of illumination optical components, and the illumination adjustment mechanisms move and/or incline at least one illumination optical component among the plurality of illumination optical components.” (Fig. 1, ref.# 11, 13, 18)

Regarding claims 49 and 51, Jewell discloses “wherein the illumination adjustment mechanism (Fig. 1, ref.# 14) applies at least one of an illumination distribution component that is inclined along the scanning exposure direction, and an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.”

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Regarding claim 62, Jewell discloses “wherein the illumination optical system has an optical axis (Fig. 2, ref.# 34 and Figure 3, center of optical system) that is coaxial with the optical axis of the projection system.”

Allowable Subject Matter

6. Claims 1-46, 52-61 and 77-83 are allowed.

7. Claims 50, 63-68, 70-73, 75, 76, and 85-90 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner’s statement of reasons for allowance:

The prior art record does not show or suggest an exposure apparatus that includes a first telecentricity adjustment mechanism that applies an oblique component to telecentricity and a second telecentricity adjustment mechanism to adjust telecentricity changing in accordance with a position from the optical axis of the exposure field of the projection system and/or the illumination field formed on the mask as claimed in independent claims 1, 19, 26, 42, 52, 55, 77 and dependent claims 50, 53, 63, 64, 68, 72, 75, 83, 85, 90.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Fuller whose telephone number is (703) 306-5641. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams, can be reached on (703) 308-2847.

Rodney Fuller
Primary Examiner

A handwritten signature in black ink, appearing to read 'R. Fuller', with a stylized flourish at the end.

March 4, 2003